USGS

WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002DC5B

Title: Bimonitoring Anacostia Watershed Pollutants

Project Type: Research

Focus Categories: Water Quality, Toxic Substances

Keywords: watershed; pollutants; biomonitoring; Corbicula

Start Date: 03/01/2002

End Date: 02/28/2003

Federal Funds Requested: $9,774

Non-Federal Matching Funds Requested: $16,584

Congressional District: DC

Principal Investigator:
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Abstract

A number of studies are being made of the problems of severe contamination of the10 km Anacostia River estuary that is the major water body of the District of Columbia. Restoration of the river is a major objective of the Mayor. These studies are being coordinated by the Anacostia Watershed Toxics Alliance of which UDC is a member. The great majority of studies are examining chemical contamination of the sediments and several sediment remediation plans are being planned. Very few studies are looking at the sources or bioavailability of the contaminants. The sources will have to be identified and controlled for effective remediation of the Anacostia estuary to take place.

The most recent WRRC study used the locally available Asiatic clam (Corbicula fluminea) to biomonitor dissolved and suspended contaminants at tributary inputs of four Anacostia subwatersheds. Two Maryland tributaries were found to be major sources of bioavailable low molecular weight PCBs, PAHs and pesticides. The research objective of this proposed continuation study will be to examine the remaining major subwatersheds of the Anacostia for their individual bioavailable pollutant signatures. This project will continue to place caged Asiatic clams in the subwatershed tributaries to indentify their contribution to bioavailable Anacostia pollutants.